



**ABSTRACT**

**NAME OF INSTITUTION** : De La Salle University-Dasmariñas  
**ADDRESS** : Bagong Bayan Dasmariñas, Cavite  
**TITLE** : Effects of Computer-Aided Instruction on the  
Academic Performance of Students in Calculus  
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**FUNDING SOURCE** : Personal  
**COST** : P15,000.00  
**DATE STARTED** : December, 1998  
**DATE COMPLETED** : May, 1999  
**OBJECTIVES OF THE STUDY:**

**A. GENERAL:**

The study investigated the effects of computer-aided instruction on the academic performance of students of De La Salle University-Dasmariñas in Calculus.

**B. SPECIFIC:**

1. To determine the academic performance of students in calculus when taught using
  - 1.1 the traditional method
  - 1.2 computer-aided instruction and traditional method



2. To determine the significant difference between the academic performance of the students in calculus taught using the traditional method and those taught using computer-aided instruction combined with traditional method.

**SCOPE AND COVERAGE:**

The investigation was conducted during the second semester of the school year 1998-1999. The subjects of the investigation were 77 second year Marketing students coming from two different classes taking up calculus who were taught by the researcher.

**METHODOLOGY:**

The study made use of the quasi-experimental design. The subjects were matched using the institutional requirements in terms of high school grade point average and entrance exam score. The subjects were further matched using their precalculus grades.

The final grades of the subjects in calculus were used to measure their academic performance. The t-test for independent samples was used to statistically determine the difference between the academic performance of the two groups of subjects.



**MAJOR FINDINGS:**

1. The mean grades of the subjects taught using computer-aided instruction combined with traditional was slightly higher than those subjects under the traditional method.
2. The difference on the academic performance of the subject in the experimental and control groups was found to be not significant at 0.05 level.

**CONCLUSION:**

The researcher hereby concluded that computer-aided instruction is as effective as the traditional method of teaching calculus.

**RECOMMENDATIONS:**

The researcher recommends the following:

1. Computer-aided instruction be used as an alternative to traditional instruction since both strategies were effective.
2. Seminars and training on the use of CAI be provided to aid teachers in formulating their own exercises and lessons as packaged in a CAI setup.
3. Future investigation of the same nature be made in other fields of knowledge using larger sample providing equal number of hours and considering a wider scope of variables.